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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,389	11/25/2003	Masahiko Hatanaka	MAT-8475US	1655
23122	7590	06/15/2007		
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER DANG, DUY M	
			ART UNIT	PAPER NUMBER
			2624	
			MAIL DATE	DELIVERY MODE
			06/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/721,389

Applicant(s)

HATANAKA ET AL.

Examiner

Duy M. Dang

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/25/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/25/03+9/16/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's preliminary amendment filed on November 25, 2003 has been entered and made of record. Currently, claims 1-11 are pending.

#### ***Drawings***

2. Figures 5-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. Furthermore, the "Haffman" shown at S22 of figure 2, S63 and S66 of figure 6 ought be changed to "Huffman".

#### ***Specification***

3. The disclosure is objected to because of the following informalities: At page 2, line 13, insert "and" between the "input still image" and "a second memory 54B". Appropriate correction is required.

#### ***Claim Objections***

4. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In this case, claim 6 is an apparatus type claim which depends

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from claim 7 which is a method claim. Furthermore, claim 6 does not refer back to the preceding claim. For proper examination on the merit, claim 6 is assumed to be a dependent claim from claim 5.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "said polynomials" (plural) in line 2. There is insufficient antecedent basis for this limitation in the claim. It ought to be read "said polynomial".

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Bracamonte et al. (USPN 6,668,089. Art of record, IDS filed on 9/16/2005, referred as Bracamonte hereinafter).

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Regarding claim 1 as a representative claim, Bracamonte teaches an image data compressing apparatus (see figure 1) comprising: an image data compressor for compressing image data input thereto at first and second compression rates to produce first and second compressed data, respectively (see compression ratios  $CR_1$  and  $CR_2$  depicted at 11 and 15 of figure 1); an approximate-expression selector having an approximate-expression table (i.e., the representation shown at column 6 lines 1-6 in together with figures 2a-2d and 4a-4d refer to the so called "approximate-expression table") including a plurality of approximate expressions corresponding to a plurality of sample data sizes (see column 6 lines 1-10, equations shown at column 4 line 25 to column 5 line 10, column 1 lines 65-68 for definition of  $CR$ , and figures 2a-2d and 4a-4d:  $m_1$  to  $m_6$  and constant values shown at column 6 lines 1-10 refers to the so called "approximate expressions". Also the  $CR_1$  includes claimed "data size") see Huffman table depicted as S63 of figure 6. In addition, the coefficients  $m$  and  $b$  of the straight line equation represented in figures 2a-2d and 4a-4d refer to the so called "expressions" because such straight line equation is also a polynomial equation. This reasonable interpretation is consistent with applicant's disclosed page 7 lines 23-25 [note that claimed polynomial does not necessarily invoke quartic polynomial therefore examiner is entitled to reasonable broad interpretation]), respectively, said approximate-expression selector selecting an approximate expression from said plurality of approximate expressions, said first approximate expression corresponding to a first sample data size nearest a data size of said first compressed data among said plurality of sample data sizes, each of said plurality of approximate expressions indicating a change of a data size in response to a compression rate (see discussion pointed out above and column 5 line 60 to column

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7 line 20); and a compression rate determining unit for determining said second compression rate based on said selected approximate expression (see item 15 of figure 1).

Regarding claim 7, it is noted that this claim is a method claim reciting the features called for in claim 1 above. Thus, claim 7 is also rejection for the same reasons as above.

Regarding claims 2-3 and 8, it is noted these claims further require “polynomial” which is already discussed in the rejection of claims 1 and 7 above.

Regarding claims 4 and 9, Bracamonte further teaches wherein at least one of said plurality of sample data sizes is not greater than a target data size (see figures 2a-2d and 4a-4d. Note CR<sub>1</sub> and CR<sub>2</sub> in figures 2a-2d are not greater than CR<sub>T</sub> and CR<sub>1</sub> and CR<sub>V</sub> in figures 4a-4d are not greater than CR<sub>T</sub>).

Regarding claims 5 and 10, Bracamonte further teaches a memory for storing said input image data (see column 1 lines 15-17); and wherein said image data compressor compresses a portion of said image data stored in said memory at said first compression rate to produce said first compressed data (see item 11 of figure 1 and column 3 lines 1-4. While Bracamonte disclose memory for input image data and partitioning image into blocks, Bracamonte does not explicitly disclose to store a portion of said input image data. However, such storing a portion of input image data is inherently included in Bracamonte in order for 8x8 pixel blocks of image input data of Bracamonte to be compressed).

Regarding claims 6 and 11, the advanced statements as applied to claim 5 above are incorporated herein. Bracamonte further teaches a plurality portion of said image data (see 8x8 pixels blocks at column 6 lines 1-4).

***Conclusion***


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsunoshita (USPN 5,608,654) is an example of image compression having a plurality of compression rates.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dmd  
6/07

  
**DUY M. DANG**  
**PRIMARY EXAMINER**